

ABSTRACT

Disclosed are compositions for shortstopping free radical emulsion polymerizations and stabilizing polymers produced from the corresponding emulsion processes. Such compositions include at least one hydrophilic radical scavenger (i.e., shortstopper) and at least one hydrophobic radical scavenger. The compositions are preferably targeted for applications in the emulsion processes of rubber latexes. These compositions exhibit excellent performance not only as shortstoppers of free radical emulsion polymerizations but also as stabilizers of the corresponding polymers. Thus, the compositions prevent additional polymerization in the particles without requiring additional stabilizer even after such polymers are steam stripped. They do so without the use of chemicals which carry a high safety, health, or environmental risk.